OneBayArea

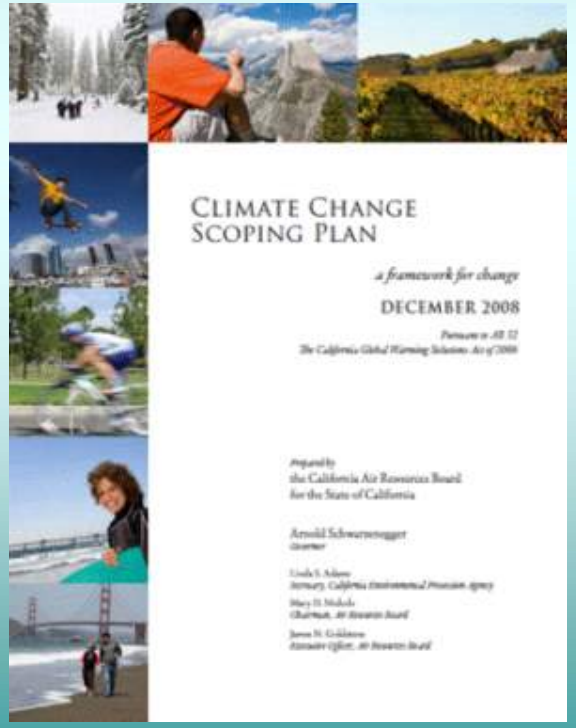
GHG Target-Setting Impacts

MTC

July 28, 2010

AB 32 Global Warming Solutions Act of 2006

- AB 32 establishes the first comprehensive program of regulatory and market mechanisms in the nation to achieve greenhouse gas (GHG) emissions reductions
- AB 32 sets GHG emissions limit for 2020 at 1990 level
  - Acknowledges that 2020 is not the endpoint
  - Points way towards 80% reduction by 2050
- Air Resources Board (ARB) adopted a Scoping Plan to achieve AB 32's GHG emissions reduction target



California's Three Pronged Approach to Reducing Transportation Greenhouse Gases
(with AB 32 Scoping Plan estimates for GHG reductions in 2020)

- Cleaner vehicles (Pavley, AB 32) - 38 tons
- Cleaner fuels (Low-Carbon Fuel Standard) - 15 tons
- More sustainable communities (SB 375) - 5 tons

SB 375 Basics

- Directs ARB to develop passenger vehicle GHG reduction targets for CA's 18 MPOs for 2020 and 2035
- Adds Sustainable Communities Strategy as new element to RTPs
- Requires separate Alternative Planning Strategy if GHG targets not met
- Provides CEQA streamlining incentives for projects consistent with SCS/APS
- Coordinates RHNA with the regional transportation planning process

Bay Area Principles for Establishing GHG Emission Targets

Proposed MTC Principle #7:

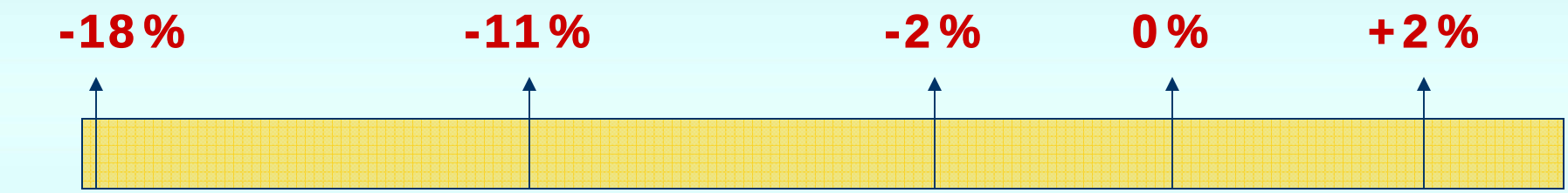
- ARB should establish Bay Area target that does not exceed 7% per capita for 2020 and 10% per capita for 2035

What Targets are the Other "Big Four" MPOs Proposing?*
(per capita GHG reduction compared to 2005)

MPO	2020	2035
SanDAG	7%	13%
SCAG	8%	6%
SACOG	6%	15%

* preliminary/proposed, subject to change

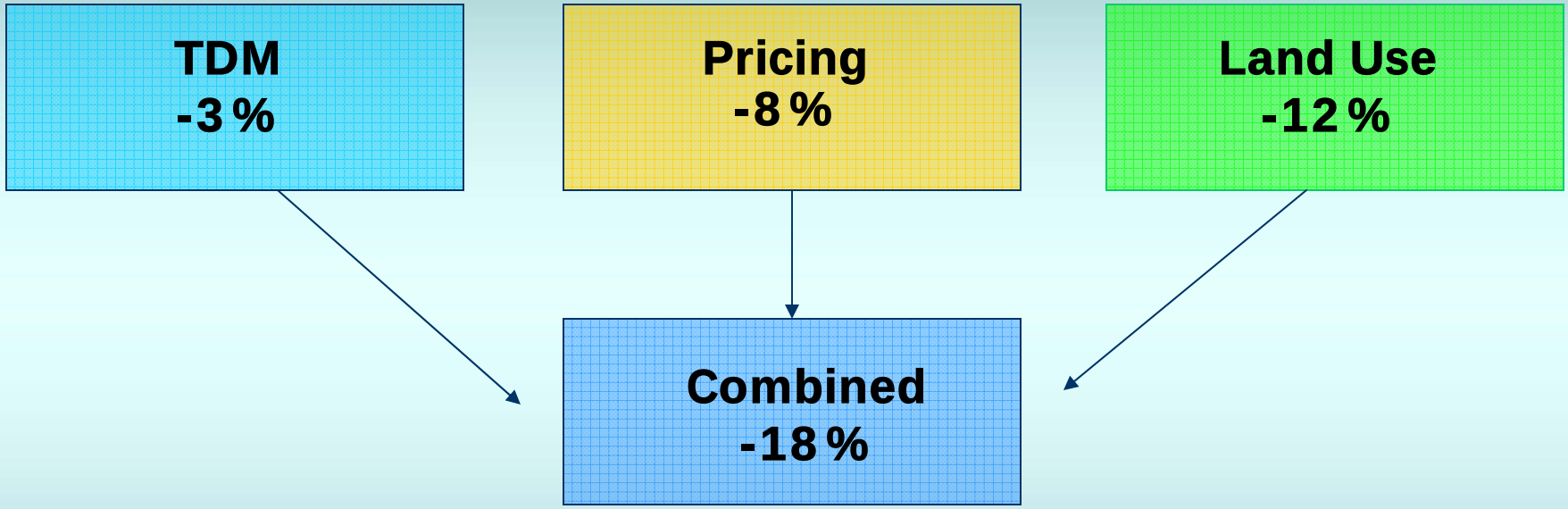
Bay Area GHG Scenarios
(% per capita - 2005 vs 2035)



Sensitivity Tests - Combined	Previous "Most Ambitious" scenario	T-2035 w/Proj 09		T-2035 w/Proj 07

More aggressive

How do Sensitivity Tests Address GHG Targets (2035)?



MTC Planning Committee Direction:

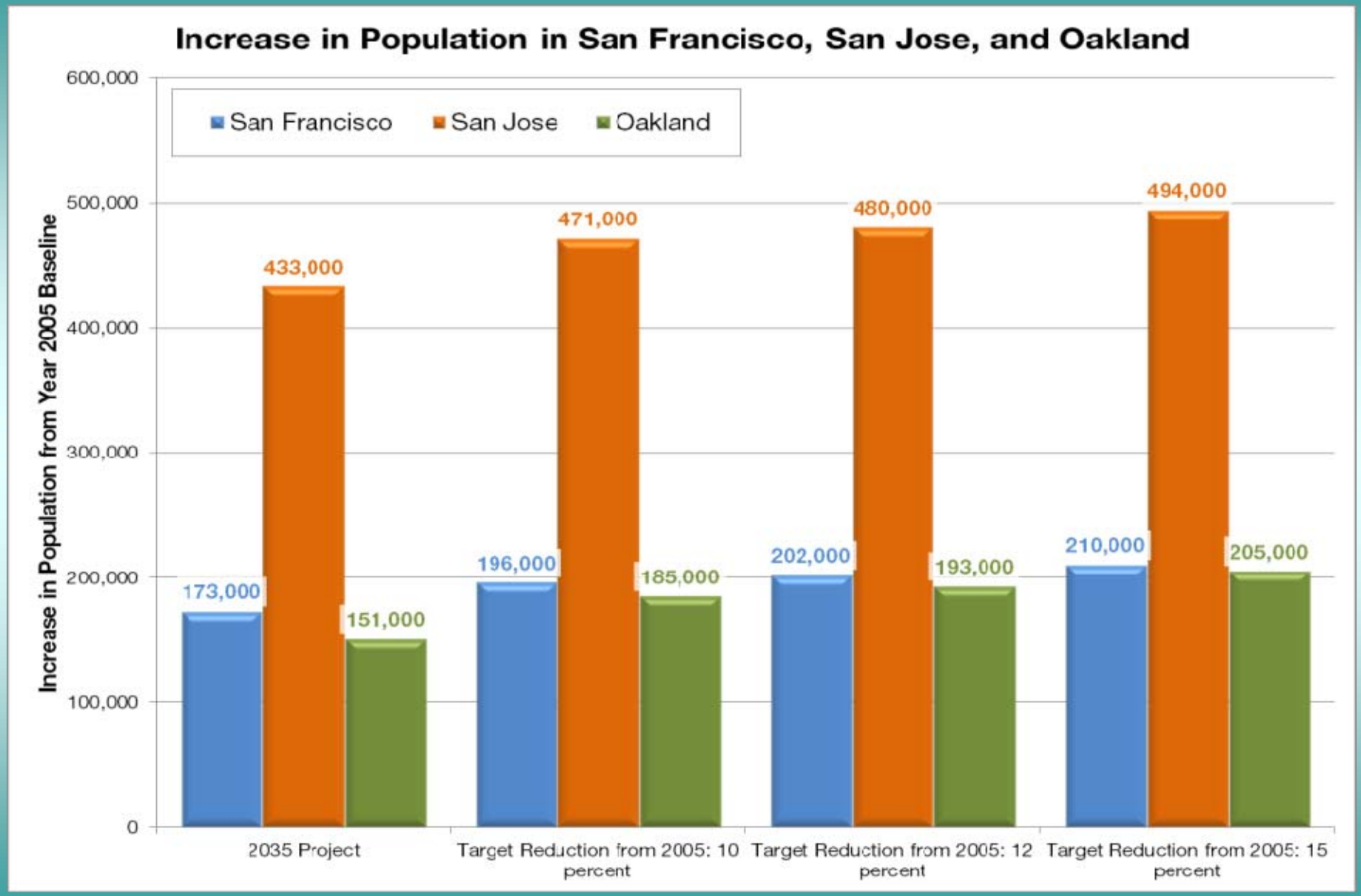
- Examine 2035 target alternatives at 10%, 12% and 15% per capita GHG reduction

- Illustrate differences in impacts on development patterns, commute costs and co-benefits

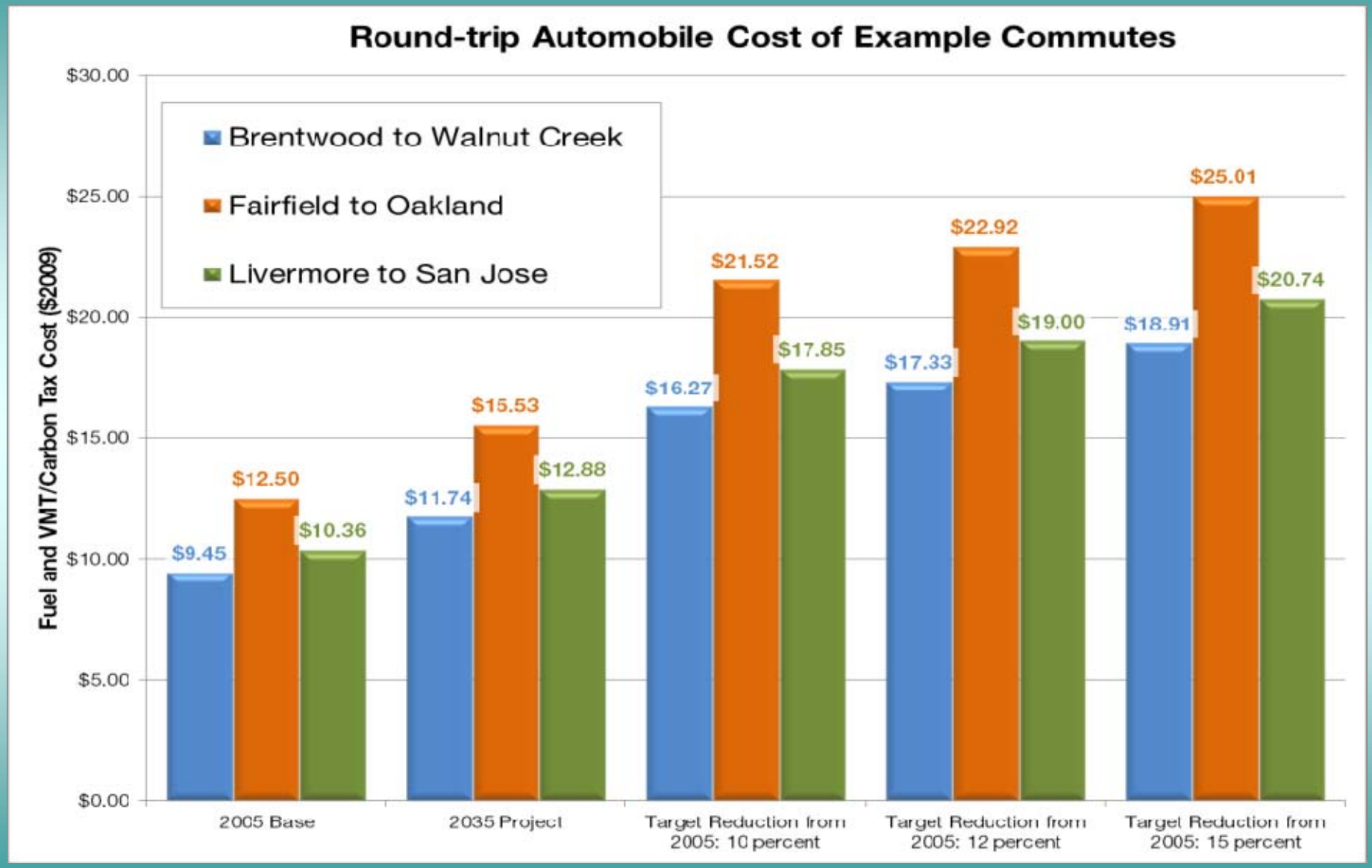
Land Use Impacts

County	Population			Percent Change	
	2005	2035 Projections 09	2035 Focused Growth	2005 to 2035 Projections 09	2035 Projections 09 to 2035 Focused Growth
San Francisco	795,800	969,000	1,008,500	22%	**4%**
San Mateo	721,900	893,000	896,300	24%	>1%
Santa Clara	1,763,000	2,431,400	2,587,000	38%	**6%**
Alameda	1,505,300	1,966,300	2,062,100	31%	**5%**
Contra Costa	1,023,400	1,322,900	1,373,400	29%	**4%**
Solano	421,600	506,500	497,600	20%	**-2%**
Napa	133,700	148,800	147,200	11%	**-1%**
Sonoma	479,200	561,500	564,500	17%	1%
Marin	252,600	274,300	278,800	9%	2%
Total	*7,096,500*	*9,073,700*	*9,412,200*	*28%*	*4%*

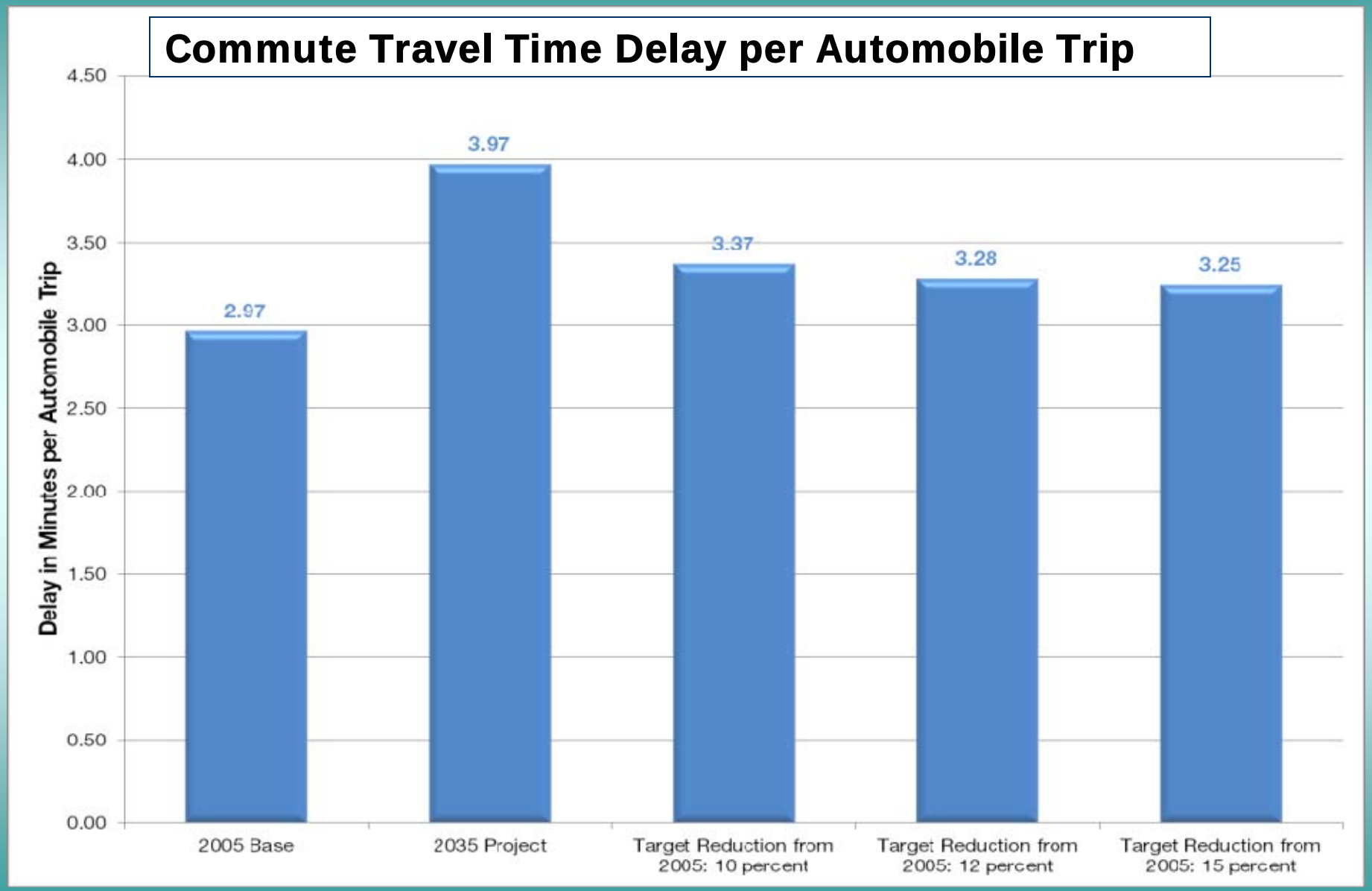
Land Use Impacts



Commute Impacts



Commute Impacts

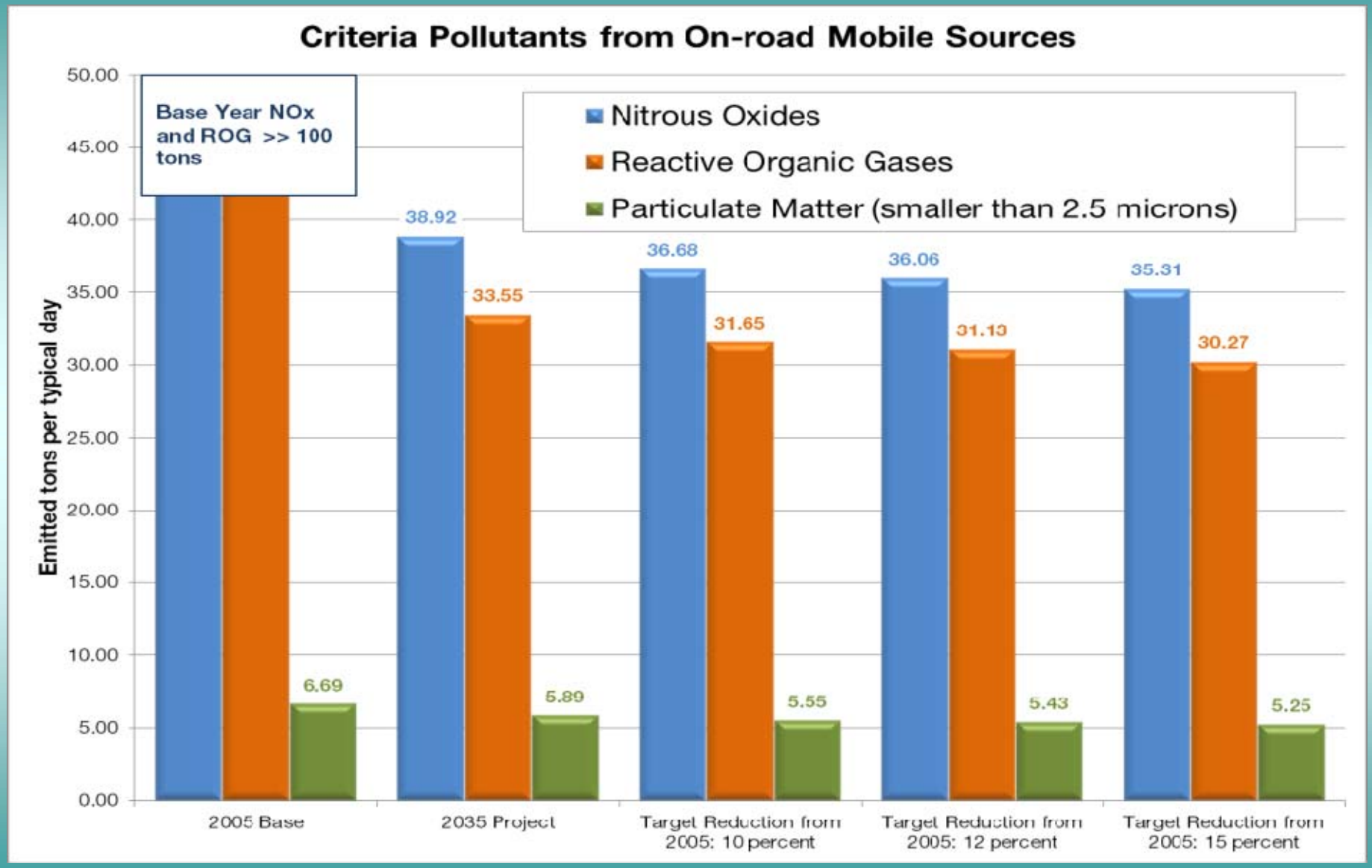


Revenue Generated from VMT Fee (2035)

- $0.25 per mile VMT fee:
  - generates $14 billion annually
  - adds $4,500 to avg. household cost

- Cost-Offset Examples:
  - Infrastructure for PDAs
  - Additional corridor/subarea transit services
  - Subsidize new affordable housing starts
  - Reimburse tax credits for low income
  - Subsidize low-income commute costs

Air Quality Impacts



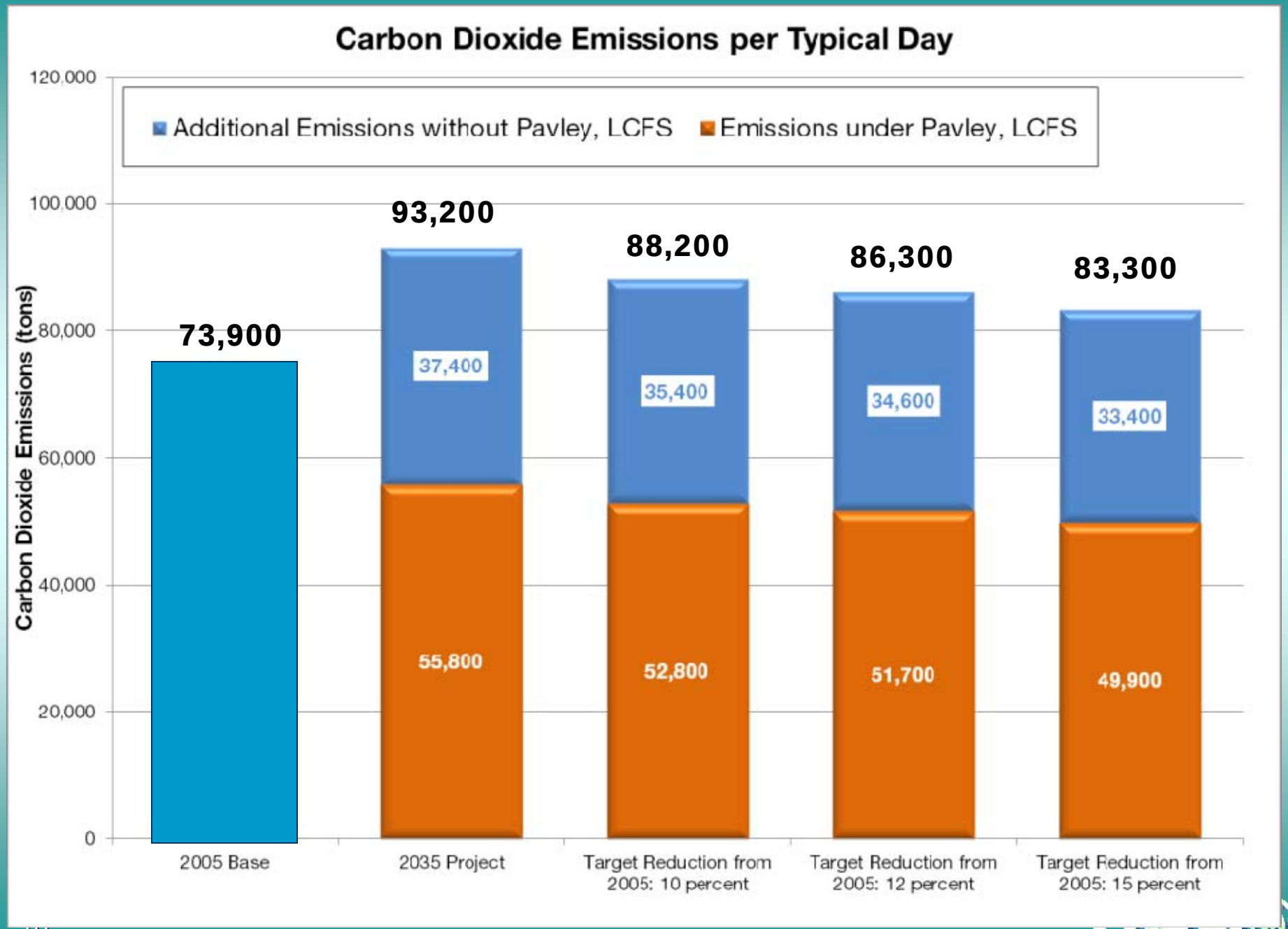
Public Health Impacts
(healthcare, lost productivity, school absences, mortality)

GHG Per Capita Reduction	Economic-Health Benefit (millions of 2010 $)
10%	$100
12%	$120
15%	$140

Other GHG Emission Reduction Comparisons
(avg. weekday pounds in 2035)

- Accelerate ZEV share in passenger vehicle fleet:
  247,000 add'l vehicles @ $10 billion = 5% per capita reduction

- Reduce freeway speed limit to 55 mph:
  5% per capita reduction (2020)


Carbon Dioxide Emissions per Typical Day
Additional Emissions without Pavley, LCFS
Emissions under Pavley, LCFS
Carbon Dioxide Emissions (tons)
120,000
100,000
80,000
60,000
40,000
20,000
0
73,900
93,200
88,200
86,300
83,300
37,400
35,400
34,600
33,400
55,800
52,800
51,700
49,900
2005 Base
2035 Project
Target Reduction from 2005: 10 percent
Target Reduction from 2005: 12 percent
Target Reduction from 2005: 15 percent

Conclusions: 2035 GHG Target

- Bay Area already is embarked on a fairly aggressive focused growth strategy
- Region is less advanced in pursuing road pricing, employer trip reduction, or “smart driving” programs
- GHG per capita reduction target in 10-12% range might be achieved primarily through more focused growth
- Target in 15-18% range probably will require greater reliance on road pricing and other strategies as well

Greenhouse Gas Target – Important Dates

- August 9, 2010: ARB staff to release draft-final targets
- September 10, 2010: MTC Planning Committee, with ABAG's Administrative Committee and JPC members
- September 22, 2010: MTC meeting
- September 30, 2010: ARB adopts targets